CRASH DYNAMICS LAB: BREAKING THE LINKS TO DISASTER

KNOWLEDGE

VOL 5 DECEMBER 2011

OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY

FIREPROOF YOUR HOLIDAYS

- WINTER PMCS
- CREW COORDINATION
- TIRE RATINGS

+ LEGAL WEATHER

U.S. ARMY
ARMY STRONG.

THE BAND OF BROTHERS & SISTERS

SCAN HERE FOR
KNOWLEDGE ONLINE

Take 5

Fireproof Your Holidays

- Ensure your artificial tree is fire retardant and certified by a recognized consumer protection agency such as Underwriters Laboratories
- Make sure fresh trees are well-watered
- Inspect holiday lights for frayed, worn wires and replace if necessary
- Keep decorations away from heat vents/fires
- Never leave food alone on a hot stove

KNOWLEDGE
OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY
LEADERS SOLDIERS CIVILIANS FAMILIES

THIS MONTH CONTENTS

4 From the CSM
6 Legal … but is it Safe?
16 Breaking the Links
20 What You Can't Smell May Kill You
22 Here We Go Again
28 A Little Slippery Self Confidence
32 No Margin for Error
34 The Little Things
36 The Right to Bear Arms
38 The Silent Recalls
40 Pushing the Limit
44 Accident Briefs

SAFETY FEATURES

8 WINTER PMCS FOR MISSION SUCCESS

12 PERFECTING AIRCREW COORDINATION

14 KNOW YOUR TIRES

FROM THE COVER

FIREPROOF YOUR HOLIDAYS 24

MEDIA RESOURCES

Posters

ONLINE EDITION

https://safety.army.mil

Join the USACR/Safety Center community on facebook

U.S. ARMY COMBAT READINESS/SAFETY CENTER

ARMY SAFE IS ARMY STRONG

Brig. Gen. William T. Wolf Commander/Director of Army Safety
Command Sgt. Maj. Richard D. Stidley Command Sergeant Major
Michael J. Negard Director, Strategic Communication

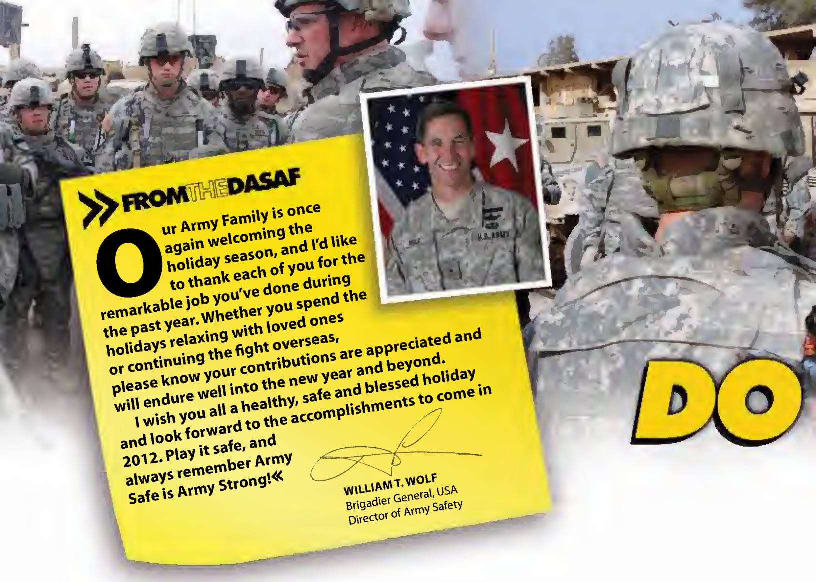
Chris Frazier Managing Editor
Bob Van Elsberg Editor
Paula Allman Editor
Lori Yerdon Editor
Blake Grantham Graphic Design
Taryn Gillespie Graphic Design
Leslie Cox Graphic Design (KAYA)

Mission statement: The United States Army Combat Readiness/Safety Center (USACR/Safety Center) supports our Army by collecting, analyzing and communicating actionable information to assist Leaders, Soldiers, Families and Civilians in preserving/protecting our Army's combat resources.

We welcome your feedback. Please email comments to **safe.knowledge@conus.army.mil**.

Knowledge is published monthly by the U.S. Army Combat Readiness/Safety Center, Bldg. 4905, 5th Ave., Fort Rucker, AL 36362-5363. Address questions regarding content to the managing editor at (334) 255-2287. To submit an article for publication, email safe.knowledge@conus.army.mil or fax (334) 255-9044. We reserve the right to edit all manuscripts. Address questions concerning distribution to (334) 255-2062. Visit our website at https://safety.army.mil.

Knowledge provides a forum for Soldiers, Leaders and safety professionals to share best practices and lessons learned and maintain safety awareness. The views expressed in these articles are those of the author and do not necessarily reflect the official policy or position of the U.S. Army, Department of Defense or the U.S. Government. Contents are specifically for accident prevention purposes only. Photos and artwork are representative and do not necessarily show the people or equipment discussed. Reference to commercial products does not imply Army endorsement. Unless otherwise stated, material in this magazine may be reprinted without permission; please credit the magazine and author.



»FROM THE DASAF

Our Army Family is once again welcoming the holiday season, and I'd like to thank each of you for the remarkable job you've done during the past year. Whether you spend the holidays relaxing with loved ones or continuing the fight overseas, please know your contributions are appreciated and will endure well into the new year and beyond.

I wish you all a healthy, safe and blessed holiday and look forward to the accomplishments to come in 2012. Play it safe, and always remember Army Safe is Army Strong!«

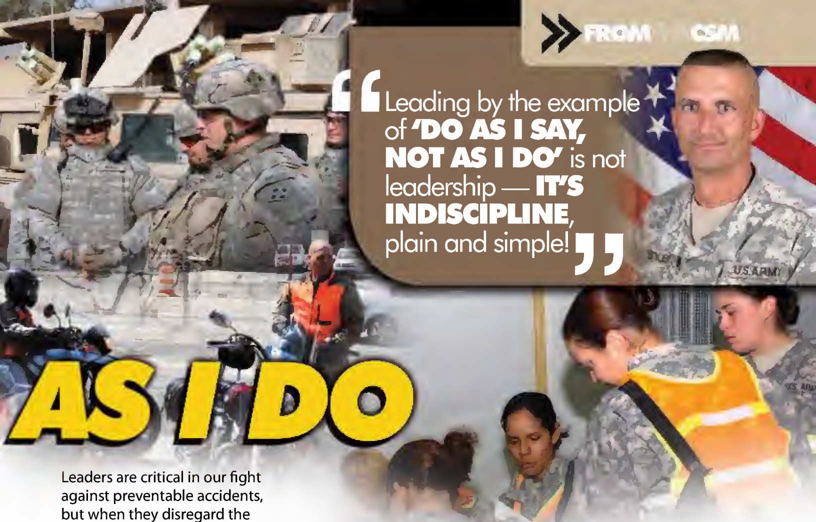
WILLIAM T. WOLF
Brigadier General, USA
Director of Army Safety

DO

Leadership is one of the most difficult jobs on the planet, especially in an Army that's been at war more than a decade. The overwhelming majority of our Leaders have done a great job managing the many challenges that have come before them: multiple deployments, doing more with less and preparing for whatever missions their Soldiers might be called to execute. In fact, excellent leadership is at the very heart of our recent success in reducing on-duty accidents to one of the lowest levels ever recorded.

Even so, there are always those Leaders who defy the very standards they're supposed to enforce. Leading by the example of "do as I say, not as I do" is not leadership — it's indiscipline, plain and simple! These Leaders aren't doing their part and either don't realize or don't care that what their Soldiers see them doing has a much greater impact than what they say to them. This mindset is irresponsible at best and fatal at worst, and we can't sit back and hope wayward Leaders will change on their own.

Fatal motorcycle accidents illustrate this point. During fiscal 2011, Leaders at the grade of E5 to O4 comprised 64 percent of all motorcycle-related deaths. Several crashes involved speeds of 90 mph or greater, and a lack of personal protective equipment was reported in many others. What kind of message does this behavior send to young and impressionable Soldiers? Junior



AS I DO

> “Leading by the example of **‘DO AS I SAY, NOT AS I DO’** is not leadership — **IT’S INDISCIPLINE,** plain and simple!”

Leaders are critical in our fight against preventable accidents, but when they disregard the standard and act recklessly, it sets a negative precedent that affects unit personnel on and off duty.

Curbing this problem requires decisive action now from Leaders from the squad up. Indiscipline is never excusable, and we have to make sure our subordinates — and sometimes even our seniors — are setting and maintaining the highest possible standards. Rank doesn’t matter when it comes to safety; no Soldier is more or less accountable than another, and we should foster a culture where corrective actions may be made without fear of retribution.

Knowing our people and setting the standard are what leadership is all about. Dropping in unexpectedly and observing your junior Leaders interact with their Soldiers takes only a few minutes and provides a priceless look into unit dynamics. Talk with your Soldiers and really listen to their concerns. Someone always knows when a Soldier is taking unnecessary risks, but you’ll never find out if you don’t ask. When it comes to safety, being in the know is what really counts!

Nothing can replace face time with Soldiers, but I firmly believe the Army Readiness Assessment Program is an essential tool for Leaders. It’s an eye-opening experience, and no other survey offers more immediate or candid feedback on critical issues linked to Soldier safety, including the unit’s leading indicators for potential loss or mishaps. More than one million responses have been logged thus far through ARAP, and it continues to pay great dividends for commanders and Soldiers at all levels. I’ve been sold on ARAP for years, and I encourage you to sign up your unit if you haven’t already.

The holidays and the upcoming new year provide a perfect opportunity to renew our commitment to safety. Look inward at how your behavior and leadership style affects others and ensure your subordinate Leaders do the same. The first life we save should be our own — that’s the best possible example we can set for the Soldiers counting on us every day. I wish you all a safe and blessed holiday season, and I’ll see you in 2012! «

Richard D. Stidley

RICK STIDLEY
Command Sergeant Major
U.S. Army Combat
Readiness/Safety Center

There I was, month 13 of a 15-month deployment. My only thoughts were of going home and reuniting with my Family. The other Soldiers in my unit were doing the same. We were told during this critical time that we needed to be more vigilant and not let complacency set in. An age-old sense of urgency associated with many aviation support profiles — to launch in marginal weather — has been the recipe for far too many aircraft mishaps.

LEGAL... but is it Safe?

CHIEF WARRANT OFFICER 2 DWAINE L. ESCH
C Company, 2nd Battalion, 227th Aviation Regiment
1st Air Cavalry Brigade, 1st Cavalry Division
Fort Hood, Texas

I headed to the hangar to check on my assigned aircraft for the day and then to the tactical command post (TOC) to check the mission profile. It was a familiar mission; a flight of two UH-60Ls were to fly a five-and-a-half-hour ring route under night vision goggles.

At the hangar, the crews continued loading the utility vehicles with necessary supplies and equipment for the mission. Sometime before sunset, I headed out to preflight the aircraft. With the preflight accomplished and the gear prearranged where we wanted it, we headed for the dining facility to grab dinner before our long mission.

The two flight crews met at the TOC for the mission briefing. The mission brief went as usual. The S-3 informed us where friendly forces were in our area, while the S-2 filled us in on where the action was in our battle space.

Another critical step was checking the weather for the evening. We had legal weather; however, the weather report showed a dust storm in our flight path. Although the battle captain knew the environmental conditions, he told us we had legal weather and expected us to accomplish the mission. I expressed my concern and some uneasiness about the situation because our crews had been caught in dust before and knew the consequences. The battle captain instructed us to at least attempt to fly to our first stop.

We boarded our aircraft, started the engines and positioned ourselves at the passenger terminal to pick up our first passengers for the evening. As the passengers boarded, I noticed a slight haze in the distance. Other crewmembers noticed the same thing. We discussed the weather conditions and decided to keep an eye on it. When fully boarded, we took off and headed to the first stop.

It was about a 20-minute flight and as we got closer, the dust storm worsened. Our visibility was rapidly deteriorating and, to make matters worse, we had only a single light source in the distance to determine our visibility. We decided to return to the airfield at that point because once we passed the light source, we wouldn't be able to see much of anything. Our aircrews carefully synchronized our return flight using proven aircrew coordination skills.

I kept an eye on the dust cloud and the instrument panel at the same time, which wasn't a good idea because I soon became disoriented. Relying on the technology rather than my senses, I transitioned inside to the instruments and noticed our nose starting to rise and our airspeed slowing. I informed my co-pilot of my observation and positioned myself to take the controls if he couldn't correct our situation. The co-pilot turned the aircraft and started a climb in preparation for an emergency GPS recovery. Soon we had turned

> “Just because the **REPORT** you receive **SAYS** you have **LEGAL WEATHER**, don’t always **ASSUME IT IS ACCURATE.**”

back and all the instruments were reading straight and level. It was only then that I was able to look outside again. I could barely see the ground. We stopped our climb at a base altitude of 3,000 feet and returned to the airfield. This time we were lucky, we arrived without having to use the emergency GPS approach. This event made me realize the importance of instrument meteorological conditions training and proper crew coordination.

Back on the ground with both flights shut down, we secured the aircraft and headed back to the TOC to check with Air Force weather regarding improved visibility later in the evening. We also obtained a report from the battle captain concerning the weather situation at the destination airfield. They were calling for three miles visibility, which is certainly legal weather. However, the weather forecaster at our station did not agree with that assessment.

What we had was conflicting weather briefs from reliable sources. What would you have done in our situation? How do you weigh the importance of the mission with your ability to complete that mission safely? We had passengers, field Soldiers, aircrew and our aircraft to consider. We informed the battle captain of our weather forecaster’s concerns of flying the mission. A description of the weather we had encountered earlier added credence to our discussions with the battle captain. He made an informed decision to put the crews on standby in case the weather lifted. When the mission window passed, he canceled the mission.

This was certainly not an isolated incident in country. On another mission, we were told we had legal weather, the forecaster reporting three miles visibility. Yet, when we actually made it to our destination, we could not see the other end of the airfield. Our pilot report, along with others, gave the forecaster more information to augment his observation. As a result, he changed his report to three-quarters of a mile visibility. This team effort ensured a more accurate assessment for the battle captain. On this day, he made the decision to shut down and wait for the weather to pass. The next day, we were then able to make it back to our home base, but not without encountering a slight amount of bad weather along the way.

Lessons Learned

Just because the report you receive says you have legal weather, don’t always assume it is accurate. It is beneficial for flight crews to know the area’s weather trends. Research the weather reports and gain the knowledge you need. Compile data from other bases and other crews to help your crew make an informed decision about your mission. Some missions require a second briefing or the completion of another risk assessment. The time it takes to complete this is well worth the effort to ensure the command is aware of the increased risk involved. This additional information will assist the approval authority in making the final decision to accept the risk.

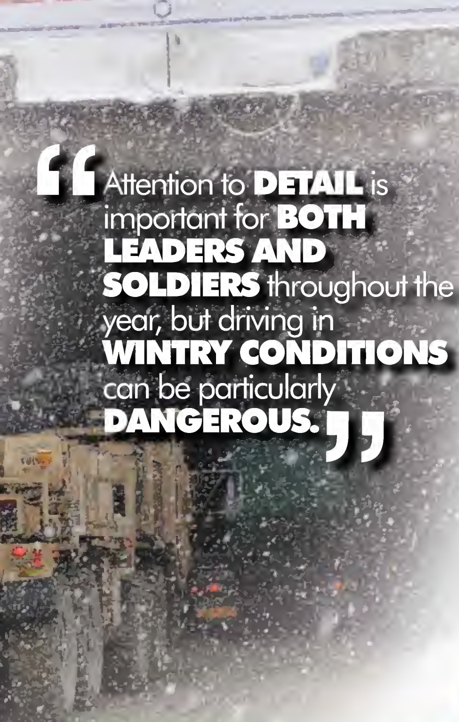
Prior to every flight, all units must use the risk management process to ensure the weather is more than just legal. This process is designed to facilitate the decision-making process. If the benefits of performing the mission do not significantly outweigh the inherent risks of marginal/borderline weather, the flight should be a no-go or implement alternate transportation to accomplish the mission safely. Following these or similar guidelines will result in a higher mission accomplishment rate, a lower weather-related mishap rate and a better image of aviation professionalism.«

Some consider a properly maintained and safely operated Army combat vehicle or Army motor vehicle the Army's first line of defense. Getting to the fight with all the necessary equipment is critical. If Soldiers don't have a way to travel, the unit is less capable of achieving its mission, putting forces on the front line at risk. Cold weather can add another layer of complexity to already challenging conditions for vehicle crews — especially in theater — so it's vital Leaders and Soldiers focus on preventive maintenance checks and services to keep their equipment fully mission capable and safe on the road.

WINTER PMCS

FOR MISSION SUCCESS

CHIEF WARRANT OFFICER 4 MARC ASSUMPCAO
Ground Directorate
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.



> “Attention to **DETAIL** is important for **BOTH LEADERS AND SOLDIERS** throughout the year, but driving in **WINTRY CONDITIONS** can be particularly **DANGEROUS.**”

When performing maintenance checks, it's imperative operators or crews follow maintenance standards published in the PMCS tables of the -10 technical manuals. The preventive maintenance checks guidelines listed in TMs help identify potential failures of subcomponents that can cause a main system to fail and result in damage to equipment and injury or death to personnel. Improperly inspected equipment can fail and degrade the unit's readiness.

First-line supervisors are vital in establishing and maintaining effective PMCS programs and ensuring their Soldiers drive in accordance with published standards. Attention to detail is important for both Leaders and Soldiers throughout the year, but driving in wintry conditions can be particularly dangerous. Using properly maintained equipment and following safe driving practices can help prevent accidents and save lives, so be prepared to beat the cold.

Tips for maintaining and driving ACVs and AMVs during winter include:

- Perform PMCS before, during and after vehicle operations.
- Ensure windshield wipers are serviceable and the rubber lip is not torn.

DID YOU KNOW?

Army Regulation 750-1, Army Materiel Maintenance, states that operator or crew preventive maintenance checks and services are the foundation of the Army's maintenance program. Having a strong, solid foundation enables the development of a long-lasting maintenance structure as well as safe posture of personnel. For more information on PMCS and other vehicle-related topics, check out the Driver's Training Toolbox at https://safety.army.mil/drivertrainingtoolbox/.

Welcome to the Driver's Training Toolbox

- Check the windshield-washer fluid reservoir regularly and refill as necessary. Debris from winter roads can be especially grimy.
- Ensure the vehicle battery is fully charged and in good condition.
- Check the lights to make sure all are operating properly. Brush off snow from all headlights and taillights and use low beams so the vehicle is more visible to other drivers.
- Check tires and chains and train your crews how to install snow tires. Inspect tires regularly, checking tread depth and tire pressure.
- When planning for operations in adverse weather conditions, add additional time to travel.
- Check road conditions along the entire route and know the difference between conditions. Road conditions might start out as GREEN or AMBER but be RED further along.
- Take it slow! You'll need additional time and stopping distance on icy roads. Drivers should adjust the following distance between their vehicle and the vehicle in front of them on ice-covered surfaces.
- Apply your brakes early to allow enough time for stopping. If your vehicle is equipped with anti-lock brakes, simply press the pedal down and hold it. In vehicles without anti-lock brakes, gently pump the pedal to bring the vehicle to a stop without skidding.
- Stay alert. Other drivers may fail to use their headlights, reduce their speed or adhere to other appropriate rules of the road.

Leaders need to be cognizant of the importance of PMCS and know it is a force multiplier. Poor PMCS can adversely affect Soldier morale and safety. Today's Army is composed of highly motivated Soldiers. I believe Soldiers are committed to doing the right thing. When given guidance, proper resources and unyielding supervision, Soldiers can and will perform proper PMCS to keep our Army Safe and Army Strong. «

ARMY COLOR CODES FOR ROAD CONDITIONS

GREEN: Normal driving conditions exist on post. Roads are clear and dry.

AMBER: Cautionary driving conditions exist on post. Roads are very wet or have ice or snow sticking to overpasses, bridges or intersections.

RED: Hazardous driving conditions exist on post. Ice or snow is sticking to most road surfaces. Heavy precipitation and/or high winds may limit visibility. Government vehicles should only be used for mission-critical operations through coordination with DOL.

BLACK: Extremely hazardous conditions exist with life-threatening driving conditions. All roads are covered with ice or deep, unplowed snow. Heavy snowfall and/or high winds causing low visibility is occurring. Only police, fire, medical and DPW equipment may be dispatched. TMP buses may be dispatched to pick up Soldiers in the field who are exposed to extreme cold that could impact on life, health and safety. All other government vehicles will be restricted from movement unless authorized by DOL (mission critical). DPW workers will be allowed to enter the installation and conduct maintenance missions.

Editor's note: The criteria for road conditions vary by installation. Be sure to check with your installation safety office for local road condition color codes.

What's in your program?

Driver's Training Toolbox
U.S. ARMY
ARMY STRONG.
U.S. ARMY COMBAT READINESS/SAFETY CENTER
ARMY SAFE IS ARMY STRONG
BAND OF BROTHERS & SISTERS

https://safety.army.mil/drivertrainingtoolbox/

PERFECTING AIRCREW COORDINATION

COMPILED BY THE DOTD FLIGHT TRAINING BRANCH
U.S. Army Aviation Center of Excellence
Fort Rucker, Ala.

The Army has spent many years developing programs to help aircrews perfect aircrew coordination to prevent accidents and preserve some of the most valuable resources in our Army — the aircraft and, most importantly, the crews who fly them. Aircrew coordination, cockpit communication management, cockpit resource management … all these terms refer to the same basic principles of ensuring an aircrew interacts with information — from the aircraft itself, other crewmembers in the aircraft or outside resources — and takes actions necessary to perform tasks efficiently, effectively and safely.

The widespread use of digital flight recorders in modernized Army aircraft provides valuable information that hasn't always been available in the past. This information is critical in determining the events leading up to an incident. Once downloaded and run through sophisticated modeling programs, this data uncovers what really happened in the accident sequence. When analyzed, these gathered facts reveal the what, when, why and how the accident occurred and how to prevent a similar incident in the future.

The value of Aircrew Coordination Training-Enhanced comes from group discussions of real scenarios and armchair quarterbacking the event. Individual crewmembers are then able to quickly analyze and react to similar situations based on earlier discussions.

Numerous interviews of rapid decision-makers in Malcolm Gladwell's book "Blink" show how making the right decision quickly is a direct result of experience. Thorough system knowledge, practicing emergency procedures and discussing real events during ACT-E training provide that experience for aircrews.

The ACT-E process begins on Oct. 1 of each year to prepare products for the coming year. The Risk Management Information System is a U.S. Army Combat Readiness/Safety Center database that lists most Army accidents in previous years and provides material for ACT-E vignettes. Project managers review these accidents to identify trends that have occurred within each particular airframe. Next, they gather pertinent media such as pictures from the crash site, voice recordings and any other contributing information. Distributed learning media developers then create storyboards for approval, being careful to follow strict guidance on how to present and protect the information.

> “The real **VALUE** of ACT-E is the **GROUP DISCUSSION** and **COLLECTIVE LEARNING** that follow the vignettes.”

The developers later produce the video scenarios and learning objectives that result in a beta version for review. This is the final opportunity to direct changes in the product. This entire process is repeated for each airframe to ensure relevant material for each community. The final step is delivery of the products to the U.S. Army Aviation Center of Excellence Directorate of Training and Doctrine for upload to the Blackboard server, typically Oct. 1 of each year. The new ACT-E is then ready for use. Below are two examples of ACT-E scenarios.

- An OH-58D crew experienced an engine failure at terrain flight altitude. There is no good place for an engine failure in any aircraft, let alone in a single-engine aircraft. Other than happening at an out-of-ground effect hover, the next worst time would have to be while conducting terrain flight. With limited reaction time and pilot hesitation and misdiagnosis, the situation was grim. The digital collector indicated the pilot did not lower the collective for more than four seconds. Interviews suggested the pilot not on the controls sensed what was happening, but said nothing as he simply prepared to "ride it in." Proper malfunction analysis and a timely, proper response certainly would have minimized the severity of the crews' injuries.
- Analyzing the statistics for the number of accidents prevented by our safety programs is difficult, but there are stories from bad situations having good outcomes that provide useful insights. One such bad situation involved the loss of tail rotor components on an AH-64D. Having listened to the flight data recorder, I can assure you those two Army aviators did the rest of us proud throughout the 15 minutes between the onset of the emergency and the safe landing back at their home base. The record serves as a reminder of how critical proper crew coordination is during an emergency. The crew's handling of the situation reminds us that crew coordination is not just about communication; it is also about prioritization of tasks and management of workload, not to mention coordination with outside resources.

What happens after these vignettes is the main impact of the program. The real value of ACT-E is the group discussion and collective learning that follow the vignettes. These case studies function as a springboard for newer crewmembers to ask questions and for experienced crewmembers to relay similar events or give a quick class on a related topic.

What Can Your Unit Do?

- Ensure team rehearsals are conducted before mission execution with emphasis on crew coordination, duties and responsibilities. Plan for the worst scenario, especially if the aircraft is "hot and heavy" or the weather is marginal.
- Conduct crew and passenger briefings religiously and meticulously using a leader-approved checklist as part of a standing operating procedure. Brief the actions and responsibilities of all aircrew members beforehand, so if an emergency does occur, there is a plan in place instead of trying to "make it up as you go."
- Emphasize to aircrews the importance of continuing to "fly the aircraft," asking for assistance, offering assistance and continuing to communicate, especially when things start to go bad.
- Conduct after-action reviews or debriefs after the mission and discuss crew coordination successes and deficiencies and how to improve.
- Use the most current ACT-E programs available for your aircraft during the mandatory annual training. For updates, call the USAACE DOTD at (334) 255-9663.«

How well do you know the tires on your car? If you're doing a permanent change of station move to Europe and ship your vehicle, do you know if your tires will be safe for the high-speed conditions of the autobahn? Before you get out there and put the pedal to the metal, you need to know your tires' speed rating.

KNOW YOUR TIRES

LARRY A. STRICKLAND
U.S. Army Garrison Hohenfels Safety Office
Hohenfels, Germany

What is a speed rating?

Developed in Europe primarily for the German autobahn, speed ratings were originally intended to help owners of high-performance cars select tires to match their vehicle's speed capabilities. As of 1991, tires are marked with information designating their size and speed rating. In the following examples, the speed rating is designated by the letters H and/or S: 215/65R16 98 H, 225/50SR16, 225/50SR16 89S or 215/50R16 89S. For more on the most common tire speed rating symbols, maximum speeds and typical applications, see the "How Hot are Your Wheels?" info graphic below. The miles per hour ratings will appear strange due to the ratings being developed under the kilometer per hour criteria.

It's important to recognize that high-speed tire ratings don't mean it is safe to drive the vehicle they're mounted on at high speed. Also, drivers should consider the road conditions or any unusual handling characteristics their vehicle may have. Regardless their tires' speed rating, drivers should never operate a vehicle in an unsafe or unlawful manner.

When replacing a tire, check your owner's manual or the information on the side of the tire to ensure your replacement tire is the appropriate size and style/classification. If the vehicle came with high-performance tires, you may be required to replace the tires with the original or a similar type of tire. Additionally, be sure to not "mix and match" (put different types of tire ratings on the vehicle). Also, your vehicle's tire speed ratings should match your driving style.

Winter driving tires in Europe

According to Consumer Reports, all-season tires aren't the best choice during winter conditions, especially if you have to drive before highway crews are able to clear the roads of ice or snow. Here are some things to consider before driving in Europe during the winter months:

- If you are a skier, most of the alpine areas require the additional use of snow chains, regardless if you have winter tires.
- Studded snow tires may not be approved in the country in which you are driving.
- All-weather or all-terrain tires may not be an acceptable substitute for winter/snow tires. For example, Bavaria has specific requirements for the type of all-weather tires that may be used.
- Check your owner's manual, tire rating, tire manufacturers' specifications and the requirements for the country where you're driving for specific criteria on which tires may be used or required.
- Some overseas U.S. military communities have considered adding tire requirements as part of annual vehicle inspections.

Ensure your move overseas goes well. Have your vehicle checked to meet emission, suspension and other standards, and make sure to have your tires checked as well. Remember, your life is riding on your tires. Make sure they're safe so they'll keep you safe.«

HOW HOT ARE YOUR WHEELS?

SPEED RATING SYMBOL	RECOMMENDED MAXIMUM SPEED	APPLIES TO PASSENGER CAR TIRES	APPLIES TO LI TRUCK TIRES
*	above 149 mph (240 kph)	YES	-
Y**	186 mph (300 kph)	YES	-
W**	168 mph (270 kph)	YES	-
V (with service description)	149 mph (240 kph)	YES	-
H	130 mph (210 kph)	YES	YES
U	124 mph (200 kph)	YES	YES
T	118 mph (190 kph)	YES	YES
S	112 mph (180 kph)	YES	YES
R	106 mph (170 kph)	-	YES
Q	99 mph (160 kph)	-	YES
P	93 mph (150 kph)	-	YES
N	87 mph (140 kph)	-	YES
M	81 mph (130 kph)	YES Temporary Spare Tires	-

BREAKING the LINKS

BOB VAN ELSBERG
Strategic Communication Directorate
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

A smashed UH-60 weathers under the hot Alabama sun, its scattered parts forever consigned to the ground. Nearby, in the U.S. Army Combat Readiness/Safety Center's new crash dynamics lab, other aircraft, joined by tactical and privately owned vehicles, rest silently at recreated accident sites. However, these "ghosts" will not remain silent forever. Groups of students learning accident investigation will relive the final moments in these tragic mishaps. What they learn may one day help save Soldiers' lives.

That these accidents happened wasn't merely happenstance, said Chief Warrant Officer 5 Dennis Seymour. As chief of the Aviation Safety Officer Course, he explained there are normally a series of events — typically referred to as links in an accident chain — that result in a crash. Seymour said the goal for students in the ASO, Ground Safety Office Course and Career Program-12 intern program is to learn to spot those links in time to prevent future accidents.

Although the Black Hawk is a relatively new "resident" of the crash lab, there are other modern aircraft, including the AH-64 Apache, CH-47 Chinook and a pair of Hunter unmanned aircraft systems. Although dated, even a UH-1, known to generations of Soldiers as the "Huey," sits damaged from an accident during a Flat Iron mission. When things go wrong in the sky, gravity is most often the victor.

However, not all fatal crashes happen in the air; many more occur on the ground. Modern armored vehicles, designed to protect Soldiers from improvised explosive devices and rocket-propelled grenades, sometimes fall victim to rollover accidents. Reflecting that threat, an MRAP Raptor rests on its side, replicating an accident where a turret came off. Seymour said it's a type of accident that sometimes leaves Soldiers crushed or even cut in half.

As sobering as those thoughts are, combat is not where Soldiers are at greatest risk for fatal accidents. It's when the sounds of battle are far away and Soldiers are home driving their car or truck or riding their motorcycle or all-terrain vehicle that they most often let down their guard. Capturing that reality is a short section of curved, two-lane country road with the guardrail peeled back to the fifth pole. The wreckage of a car bears testimony to how a young Soldier lost control, slammed into the guardrail and died. Elsewhere, a crashed motocross bike recalls the death of an NCO on an installation off-road riding range. A damaged all-terrain vehicle depicts the night an intoxicated Soldier lost his way on an unlit gravel road, went into the trees and was killed. None of these accidents are fictional. Each one, Seymour said, was developed from an actual investigation.

Students in the aviation, ground and civilian intern safety classes are introduced to these accident scenes only after having completed weeks of classroom training. When it's time for them to go face-to-face with the facts, instructors have them assemble a team, selecting a board president, recorder, physician, maintenance officer and other advisers. They are given what is called a "redacted" (victims' personal information removed) red book containing certain facts about the actual accident. These may include the aircraft's heading, airspeed, where the crash occurred and information on survivors, if any.

Upon arriving at the lab, students tape off the crash site and begin collecting and analyzing the evidence as the board recorder photographs the accident site. Scouring the landscape for ground scars and examining pieces of wreckage for other clues, students unwind the events leading to the crash as they search for the contributing factors. Classes they have received in metallurgy equip them to spot things such as metal fatigue on tail rotors.

Their time at the lab is relatively brief, typically about four hours. After gathering the evidence, the students will return to their classrooms to deliberate the facts. However, that may change in the future, Seymour said. Plans are in place for an onsite industrial hygiene lab that will serve as a classroom, allowing students to easily return to crash sites and gather additional information.

Just as in an actual investigation, once the findings and recommendations have been determined, the students outbrief the unit's chain of command — in this case, their instructors. But when they do, it will be after having gathered information at the most up-to-date and diverse crash dynamics lab within the Department of Defense. Nothing in the sister services or in the civilian community can compare, Seymour said.

That the new lab exists can be credited to Brig. Gen. William T. Wolf, director of Army Safety and commanding general of the USACR/Safety Center, who obtained $800,000 to expand and improve what had been a sorely out-of-date facility. He did so pursuing a specific goal.

"He wanted to make it more relevant to what we're doing today," Seymour said. "That's hard to do when you're using aircraft that are 40 years old. Most of the aviators flying today have never even strapped on a Huey before."

For Seymour, who has served as an accident investigator and is nearing the end of his career, seeing this come together has special significance.

"It's a kind of legacy that we can leave for the younger men and women who will use their training to help prevent accidents in the future," he said. "We've started something here that is going to continue for the Army from here on out." «

Get the tools and information necessary to protect the Civilian workforce.

Civilian's corner

https://safety.army.mil

Keep your Civilians safe on and off duty. Log on today!

ARMY SAFE IS ARMY STRONG
Soldier's
Family
Leader's
Civilian
U.S. ARMY
ARMY STRONG.
U.S. ARMY COMBAT READINESS/SAFETY CENTER
ARMY SAFE IS ARMY STRONG
BAND OF BROTHERS & SISTERS

What You CAN'T

MAJ. RUBEN I. ORTIZ
III Corps Surgeons Office
Fort Hood, Texas

As the weather turns colder, many of us will rely on furnaces and portable heaters to stay warm. Some will also unknowingly invite a killer into their home.

The winter months are when individuals are most at risk for carbon monoxide poisoning. Known as the "silent killer," CO is a colorless, odorless, tasteless and nonirritating gas. According to a Centers for Disease Control and Prevention report, CO poisoning is a leading cause of unintentional poisoning deaths in the United States.

Carbon monoxide develops from the incomplete combustion of wood, coal, oil, kerosene, natural gas, gasoline and propane. People risk exposure to the poison when they heat their homes with outdoor grills, hibachis or gas ovens with the oven door opened. The poisonous gas emitted from burning fuels or from car exhaust can build up very quickly and overcome individuals without warning, even

Smell May Kill You

in areas that seem to be well ventilated.

At lower levels, the initial symptoms of CO poisoning may include fatigue, headache, dizziness, nausea, visual disturbances, irritability and confusion. Unfortunately, diagnosis is problematic because these symptoms are nonspecific and may be mistaken for the flu or food poisoning. If you experience any of these symptoms in your home but feel better when you go outside — and then find the symptoms reappear once you're back inside — you may have CO poisoning.

As exposure levels increase, the symptoms of CO poisoning become more severe. At moderate levels, individuals may experience tightness across the chest, severe headaches, dizziness, drowsiness and nausea. Prolonged or high exposures may result in vomiting, confusion, muscle weakness, collapse and even death.

Preventing many CO poisoning deaths is relatively easy to do with regular maintenance of heating systems and the installation of CO detectors. There are a variety of detectors on the market, all of which monitor the air for high levels of CO. The detector identifies CO from any source; however, it will not detect smoke, fire or any other gas.

For safety's sake, install at least one CO detector near sleeping areas in homes with portable heaters or gas or oil furnaces. Place additional detectors in living areas or near, but not in, the furnace room. The detector should be in an area where everyone in the house will hear it — even those sleeping.

However, never consider CO detectors as a replacement for properly using and maintaining fuel-burning appliances, the Environmental Protection Agency cautions. If you suspect you are experiencing CO poisoning, get fresh air immediately. Open the windows and doors for more ventilation, turn off any combustion appliances and leave the house. Once away from the source of exposure, seek prompt medical attention and call your fire department for CO detection. For more information about CO poisoning prevention, visit the EPA's website at www.epa.gov.«

DID YOU KNOW?

To reduce your chances of carbon monoxide poisoning, take the following precautions:

- **Have fuel-burning appliances such as furnaces, water heaters, ranges, ovens, dryers, space heaters, fireplaces and wood stoves inspected and serviced by a trained professional before the onset of cooler temperatures.**
- **Purchase appliances that vent fumes to the outside of your home. Have those appliances installed and maintained by professionals. Ensure you read, understand and follow the safety precautions for each of these appliances.**
- **Never sleep in a room with an unvented, fuel-burning space heater.**
- **Never use a gas oven to heat your home — even for a short period of time.**

HERE WE GO AGAIN

MASTER SGT. JOHN COLLINS
Operations Division
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

"Here we go again … same old stuff again!" Remember marching to those words? Sometimes it seems like all we do in the Army is train. Each week brings a new method or technique that must be incorporated into our kit bag. And as soon as it is mentioned, you either hear or say those magic words, "Here we go again!"

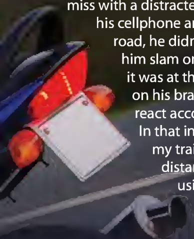
For Army riders, like me, it seems there are always new training requirements that make us debate if riding is worth the hassle. For more than 20 years, I've loved cruising on the open road and enjoying the ride. For me, it is worth it.

If you're curious why I brought this up, it is because there is a new training requirement for riders in the Army. If you check out Army Regulation 385-10, you'll see "motorcycle sustainment training" has been added. What is it? Basically, it puts in place a three-year cycle for riders to go back and retake the Experienced RiderCourse, now known as the Basic RiderCourse II, or the Motorcycle Sportbike RiderCourse.

When I heard about this, I thought, "I've been riding for years and have already completed this training before, so why do I need it again?" However, since I work at the U.S. Army Combat Readiness/Safety Center, I figured I'd better get into compliance, regardless my personal feelings. Therefore, I signed up for the first available Basic RiderCourse II course at Fort Rucker. I showed up with some preconceived ideas of how the training would go. I was in for a surprise.

When I first took the Motorcycle Safety Foundation's Experienced RiderCourse three years ago, I owned a 2008 Suzuki C90T. This time around, however, I was on a 2004 Harley-Davidson Ultra Classic equipped with a full touring package. Trying to adjust to an additional 200 pounds and the Harley's narrower tires, I stumbled going through the corners on the new Basic RiderCourse II. During one of the turns, I drug my floorboard a little. The sound of it dragging on the range surface caught me off guard. The instructor demonstrated the exercise and then began giving me some pointers based upon what he was seeing. I made some adjustments and, suddenly, it was "game on." It was like an epiphany — my bike and I were operating in sync — just like we should be. I also realized the training was working, rebuilding skills that had degraded over time. By the end of the day, I completed the course and felt more confident operating my motorcycle. The attitude, "Here we go again," had changed as I saw the bigger picture. And I was about to need the skills I'd just refined.

The following weekend, I rode to Nashville, Tenn., for the Tennessee



State University Motorcycle Rally. Riding in bumper-to-bumper traffic in downtown Nashville, I had a near miss with a distracted driver. Too busy talking on his cellphone and not paying attention to the road, he didn't notice the driver ahead of him slam on his brakes. When he finally did, it was at the last second and he jammed on his brakes. This, in turn, caused me to react accordingly by doing a quick stop. In that instant, I was thankful for the way my training had emphasized following distances, evasive maneuvers and using the front and back brakes to stop without sliding. Where I'd originally taken the course to be in compliance, now I was grateful for the way it prepared me for the risks on the road.

> "No matter how you **MITIGATE THE RISK,** riding a motorcycle is an activity that will **ALWAYS BE RISKY.**"

As an avid rider, I had become complacent in my riding skills and even developed a few bad habits. Both of these were sure telltale signs that I was in need of the refresher training program. The old adage, "It's like riding a bicycle, you never forget," does not apply to riding motorcycles. The skills needed to ride and operate a motorcycle are perishable and need to be refreshed. It is also important to have refresher training when changing motorcycles, as each brand and style operates differently. So when your command says there is new or additional training required for riding a motorcycle, keep an open mind.

No matter how you mitigate the risk, riding a motorcycle is an activity that will always be risky. However, you can still have fun and enjoy the ride. Take the time to inspect your bike, ensure you have plenty of rest, dress appropriately for the ride and take every opportunity to sharpen your skills for riding. Next time you hear that more requirements for motorcycle training are coming, embrace it and know that it may save your life by keeping you on your "A" game.«

U.S. ARMY SAFETYNET

Army Safety Net allows members to quickly exchange safety knowledge. This exchange of knowledge is accomplished through sharing ideas, experiences, lessons learned and best practices. This enables Leaders at all echelons to make better-informed risk management decisions.

https://forums.army.mil

Share info and LEARN with thousands of members

Fireproof Your

Whether you're celebrating the 12 days of Christmas, eight nights of Hanukkah, seven principles of Kwanzaa or any other special holiday tradition, a fire-safe environment is one gift everyone can appreciate.

Holidays

TRACEY RUSSELL
Ground Directorate
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

According to the U.S. Fire Administration, residential fires peak during the winter months. They estimate more than 400 holiday fires occur in American homes each year, resulting in dozens of deaths and injuries. The following tips, offered by the USFA and National Fire Protection Association, can help prevent your holiday celebration from going up in flames.

Christmas Trees

- Ensure artificial trees are labeled, certified or identified by the manufacturer as fire retardant.
- Choose fresh trees with green needles that do not fall off when touched, and trim one to two inches from the base of the trunk before placing the tree in a stand.
- Place trees at least three feet from heat sources like fireplaces, radiators, candles, heating vents or lights.
- Add water to tree stands daily.
- Never use lit candles to decorate trees, and keep lighters, matches and other sources of open flame far away from trees.
- When a tree begins shedding needles, it's time to dispose of it. Dried-out trees are a fire hazard and shouldn't be left inside or outside the home or garage. Check your local news agencies to find a tree-recycling program.

Holiday Lights

- Before use, inspect holiday lights for frayed wires, bare spots, gaps in insulation, broken or cracked sockets and excessive kinking or wear. All lights should be marked as safe by an approved testing laboratory.
- Never connect more than three light strands together unless the directions indicate doing so is safe. Connect strings of lights to an extension cord before plugging the cord into an outlet. Periodically check wires to ensure they are not warm to the touch.
- Never leave holiday lights unattended while on.
- Bring outdoor electrical lights inside after the holidays to prevent wear.

Holiday Decorations

- All decorations should be nonflammable or flame retardant and placed away from heating vents.
- Never burn wrapping paper in a fireplace — doing so can result in a very large fire that involves the chimney.
- Ensure trees and other holiday decorations do not block exits. In the event of a fire, time is of the essence. A blocked entry or exit puts you and your Family at risk.
- Avoid using lit candles. If you do burn them, ensure they are in stable holders and placed out of easy reach to prevent them being accidentally knocked down. Never leave candles burning unattended.

Cooking

- Keep towels, potholders and curtains away from open flames, ovens and stovetops.
- Never leave cooking food on the stove. A serious fire can start in seconds.

> “While **PREVENTING FIRES** is extremely important, you must also be **PREPARED IN CASE A FIRE** does occur.”

- Clean cooking surfaces regularly to prevent grease buildup.
- Never use a stove or oven to heat your home.
- Double-check the kitchen before you go to bed or leave the house to ensure all appliances are off.
- Always wear short or tight-fitting sleeves when cooking.
- Heat cooking oil slowly to avoid burns from spattering grease, and be extra careful when cooking deep-fried food.
- If a cooking fire starts, turn off the stove or burner and place a lid on the pan to smother the flames. Never throw water on a grease fire!

Fireworks

- The best way to enjoy fireworks is to visit public displays put on by professionals who know how to handle fireworks safely.
- If you plan to use fireworks, make sure they are legal in your area.
- Never light fireworks indoors or near dry grass.
- Always have a bucket of water and/or a fire extinguisher nearby. Know how to operate fire extinguishers properly.
- Never wear loose clothing when using fireworks.
- Stand several feet from lit fireworks. If a device does not go off, do not stand over it to investigate. Douse the device with water and dispose of it.
- Always read the directions and warning labels on fireworks. If a device is not marked with contents, directions and a warning label, do not light it.
- Supervise children around fireworks at all times.

While preventing fires is extremely important, you must also be prepared in case a fire does occur. One of the best ways you can protect yourself and your loved ones is to install smoke alarms throughout your home. According to the NFPA, nearly two-thirds of home fire deaths occur in homes with no smoke alarms or working detectors. Pick up new batteries as part of your holiday shopping and test alarms before festivities begin. Also, ensure your Family knows what to do in the event of a fire. Prepare an evacuation plan with at least two escape routes identified from each room and practice it often.

However you choose to celebrate your holiday, take time to work fire prevention into your plans. The new year is waiting — welcome it safely! «

Family engagement kit

https://safety.army.mil

On the home front, a Soldier's "battle buddy" is often his or her Family. Check out the new Family Engagement Kit to learn how you can look out for the safety of your Soldier. The kit features a variety of tools, including videos, real-life stories, resources and tips to keep your Soldier safe.

U.S. ARMY
ARMY STRONG.
U.S. ARMY COMBAT READINESS/SAFETY CENTER
ARMY SAFE IS ARMY STRONG
A BAND OF BROTHERS & SISTERS

A LITTLE SLIPPERY SELF

I've been driving since I was 16 years old. I'd like to think I'm an "average" driver with a safe driving record — barring the occasional speeding violation. I can count on one hand the number of motor vehicle accidents I've experienced. The Army has provided me with very comprehensive driver training to make me aware of the hazards on the road. However, I had one of those lessons reinforced the hard way to help me realize how important that training was.

CONFIDENCE

CHIEF WARRANT OFFICER 3 QUINCY T. BLUNT
B Company, 1st Battalion, 13th Aviation Regiment
Fort Rucker, Ala.

I was a young, overconfident and slightly arrogant warrant officer at the time, assigned to the 10th Mountain Division at Fort Drum, N.Y. Having grown up in the southwest, I was very unfamiliar with winter driving in the northeast, which can be an extremely harsh, eye-opening experience. As would be expected given the region, winter driving dominated our safety discussions. Multiple driving awareness classes and training sessions were conducted to educate Soldiers such as myself on how to deal with the winter elements.

Unfortunately, like many others, I had the typical "It-won't-happen-to-me" mentality. My car was very reliable and I was so confident of my driving skills that I assumed only an idiot would get into trouble driving in winter conditions. I'd taken some advice and winterized my car, at least as far as I thought I needed to. Unfortunately, I wasn't quite prepared for what was about to happen to me.

One weekend, I made an impulsive decision to travel 70 miles south to Syracuse, N.Y. We'd had some heavy snowfalls during the previous days and I took that into consideration. This particular day the weather was slightly clearer and warmer as I took off during the early afternoon for the hour-long drive to Syracuse. While there, I neglected to keep myself updated on the evening weather forecast. As the evening approached, the temperatures dropped significantly, creating icy conditions on the roads.

Finally, it was time to head back to Fort Drum. I was only about 10 minutes into my return trip when it began to snow. I hadn't taken into account the unpredictability of the lake effect snowfall drivers often experience on Interstate 81 between Syracuse and Watertown, N.Y.

Recognizing the situation, I used some common sense and reverted to my driver's training, slowing down significantly. Visibility went from moderate to poor as I continued going north at 30 to 35 mph with my hazard

lights flashing. At that point, I should have stopped, but I felt confident and told myself, "I'm doing OK. I can tough this out."

I noticed another vehicle ahead of me, but I couldn't determine the distance between us. As I started slowing down, I realized it had stopped in the road. Instinctively, I hit the brakes. Going into a spin, I remembered my winter driving training and turned into the skid. This was the first time I ever actually had to do that, but it indeed assisted in stopping me before I went off the road.

My heart pounded in my throat. After I caught my breath again, I realized I'd spun 180 degrees and was now facing oncoming traffic. I could now see headlights in front of me and quickly flashed my high beams to alert oncoming drivers. This bought me a little time as I waited for the traffic to pass before turning around to go in the right direction. I then proceeded to the next available exit, pulled off the highway and waited for about 40 minutes to let the snow subside. After that, I got onto the road and made it back safely. However, as I drove I saw several drivers who hadn't been as fortunate and had slid off the road.

I will never forget that day and the problems I thought would never happen to me. Over the next couple of years, I saw many other drivers experience similar or worse situations.

My overconfidence was the key factor that put me at risk that night. It led me to exercise poor judgment by trying to drive through dangerous winter weather. I could've easily waited out the snow in Syracuse or pulled off the road when the snow began. However, I let the "it-won't-happen-to-me" mindset blind me to the risks that day.

Sometimes, we rely too much on our opinion of ourselves and our ability to make good decisions rather than viewing things objectively. Overconfidence can be a game changer, and you can't always predict what direction things will go. I learned through this that patience is, indeed, a virtue. In fact, in regard to safety, being patient might just be the best way to avoid becoming a patient!«

> "**UNFORTUNATELY**, like many others, **I HAD** the **TYPICAL** 'It-**WON'T**-happen-to-me' **MENTALITY.**"

facebook

Do You Like Us?

Stay Connected to Safety

Check out the U.S. Army Combat Readiness/Safety Center's Facebook page for the most recent news stories, videos, photos, reminders, alerts and announcements by the Army's premier safety professionals.

Join the USACR/Safety Center community on Facebook. Also, don't forget to connect with Army safety at these sites:

YouTube flickr vimeo twitter

U.S. ARMY ARMY STRONG

U.S. ARMY COMBAT READINESS/SAFETY CENTER

ARMY SAFE IS ARMY STRONG

BAND OF BROTHERS & SISTERS

NO MARGIN FOR ERROR

CHIEF WARRANT OFFICER 3 JUSTIN TRADER
B Company, 1204th Aviation Support Battalion
Birmingham, Ala.

In the summer of 2000, my commander gave me a mission to set up a CH-47D helicopter static display. The scheduled takeoff time was 7 a.m. with an estimated time en route of two hours. With such an early takeoff time, the pilot in command wanted to preflight the aircraft the night before. Since I was the flight engineer on this mission, I normally would be present during the preflight to assist the pilots with the inspection. However, I was conducting another task on a different airframe and couldn't break free to open panels and remove covers for the pilots. That was the first mistake.

Another FE stood in and assisted the PC with the preflight. Fortunately, our unit worked well together and all FEs were familiar with the eight aircraft assigned to us, including the problems with each aircraft. The PC completed his preflight and the "stand-in" FE locked down all the cowlings, panels and tunnel covers. He then reinstalled all covers and tie-downs in preparation for leaving the aircraft outside for the night.

When I arrived the next morning, I grabbed my gear, logbook and fuel sampling equipment and made my way out to the flightline. When I left the hangar the night before, I could see five aircraft tied down on the flightline. On the aircraft we were taking this morning, I noticed the combining transmission (C-box) cover missing. I stopped for a moment, but then reminded myself that one of the eight aircraft had a missing C-box cover for some time now.

As I approached the aircraft, I assumed this was the aircraft with the missing cover. I continued to get ready for the mission, performing my fuel sample and removing the tie-downs and covers. I double-checked all the latches, panels and tunnel covers for security. Completing a final review of the logbook, I got ready for the mission. This was my second mistake, since I didn't check the logbook for any notation of a missing C-box cover, which would have been required to order a new one.

The rest of the crew arrived and the aircraft was ready to go. About 45 minutes into the flight, my crew chief and I were conducting a ramp and cabin check. I was performing checks upfront while she was in the back of the aircraft checking the maintenance panel and various other areas. She turned to me and asked if I smelled something burning. I checked and the only odor I smelled was hydraulic fluid, which is usual on the ramp of a CH-47D. We double-checked all the levels, temperatures and pressures. There was no indication of any problems, so we monitored the area.

We reached our destination with no incident or hint of odor. After we shut down, we performed a postflight inspection, in which I went straight to the C-box area and found the missing cover. After a quick inspection, I saw an entangled mess — the C-box cover was located in the No. 7 driveshaft and the C-box forward adapter.

Fortunately, the cover had spun with the driveshaft and didn't lodge or cut into the shaft. The only sign of damage was some slightly worn paint from the shaft. What we had smelled was probably the C-box

cover heating up as it rubbed against the shaft. We cleaned up the area, found all five metal hooks and removed all canvas bits. Then, after further inspection, we received clearance from maintenance and were able to complete our mission and return home.

Lessons Learned

There were many lessons learned that could have prevented this incident from happening. Fortunately, this did not turn into a catastrophic incident and we were able to return home safely. I thought I knew this aircraft well. However, when I noticed the cover missing during the beginning of the mission, I had already talked myself into believing this was the aircraft with the missing cover. In fact, that particular aircraft was in the hangar. I reviewed the logbook, but I never noticed the cover written up or the part placed on order. I should have caught the write-up because I knew accountability for the cover was important. My assumption could have caused a disastrous accident.

One other lesson learned … in airframes that require a crew of three or more, an FE or CE really should be present to conduct the preflight with the pilots. Someone should have accounted for the cover. Then, of course, a proper recon of the logbook would have prevented the incident.

Additionally, the FE who performed the preflight should have never placed the cover down on the airframe in the driveshaft area. After we reported this incident to the facility, we conducted a safety meeting to prevent these types of maintenance errors. When questioned about his mistake, the FE who performed the preflight was adamant he had not left the cover in the C-box area. In aviation, it is very important to admit when you are wrong. This maintains that level of integrity and lets others know we are really looking out for the best interest of others and the mission. When incidents like this happen, it is far more forgiving if one can admit the mistake, learn from it and share the lessons learned. «

> “In **AVIATION**, it is very **IMPORTANT** to **ADMIT** when you are **WRONG**.”

The Little THINGS

LT. COL. PHILLIP MONAGHAN
Joint Force Headquarters
Mississippi Army National Guard
Jackson, Miss.

It was a cold December day in Mississippi. The temperature was a crisp 28 F and expected to drop to 8 F after dark. That was fine with me since deer move better when there is a cold front.

On this particular Friday, I planned to leave work early so I could go hunting at my deer camp that afternoon. I had called my hunting partner the night before to ask him if he was going up that afternoon as well. He and I hunted together as much as possible — not only for friendship, but also for safety reasons. Unfortunately, he couldn't leave early, but said he would make it to the camp later that night.

Ordinarily, the camp was buzzing with other hunters; but when I arrived about 1 p.m., no one was there. I expected that other hunters would arrive soon, so I put my gear in a camper trailer, changed into my hunting clothes and made sure my rifle was ready.

Confident I had everything in order, I signed out of the camp

and headed to a deer stand about five miles away. Adding to my confidence was the fact that a standing, unwritten rule at the camp was if a hunter goes out and hasn't checked back in 30 minutes past dark, we (other hunters) go out and search for the tardy hunter.

I drove to a spot where I usually park and walked the rest of the way to a stand about 1,000 meters down a trail into the woods. I crept through the woods slowly as to not scare any deer that may have been out feeding already.

After reaching the stand, I put out some scent and started climbing. This particular stand was a lock-down type with screw-in steps reaching 24 feet up into the tree.

After climbing up, I attached my safety belt to the tree and sat down. At 4:45 p.m., I heard what sounded like deer fighting so I blew my grunt call, waited and listened. The sound stopped. I thought, "Great, you scared him off."

I hadn't heard anything for about 15 minutes when a stick behind me snapped. My heart started beating out of my chest because I thought a buck had gotten behind me. I slowly turned my head to see a big doe to my left with her nose on the scent I had put out. I raised my rifle and "BANG!" she hit the ground.

I looked at my watch and noticed it was only 5:05 p.m. In Mississippi, you can harvest a buck and a doe the same day, so I stayed in the stand hoping a buck would come out before dark. Sure enough, one did and, as he turned broadside, I shot him. He hit the ground and didn't move.

It was still light so I got on the first step, unhooked my safety belt (you might be thinking I was going to fall at this point, but keep reading) and climbed down to look at my deer. I looked at the doe first since she was only 15 yards away; the buck lay across a little creek about four or five yards away.

I put my rifle on my shoulder, crossed the creek and walked toward the buck when he suddenly pushed himself up on his front legs! I was not about to let that buck get away, so I pulled my rifle off my shoulder and began chasing him. In my excitement, I paid no attention to where I was running, tripped on some vines and fell hard on my right shoulder. Even though my arm hurt, I got up and continued the chase. I spotted the buck, lying on the ground again, and tried to raise my rifle with my left arm, but it was too heavy. I put my rifle across my back and got closer to the deer. The buck started pushing himself up again, so I jumped on his back. He bucked, wiggled, kicked and slid out from under me. At that moment, the thought occurred to me this deer might end up kicking me to death! Somehow, though, I managed to get the rifle to his neck and end the struggle at last.

At this point, my arm was useless and now I had the dilemma of getting two deer and myself out of the woods. My goal was to drag the buck back to the creek near the stand and go get help, but the pain in my shoulder had really begun to set in.

I made it to the creek, slid into it and waded through the cold water until I came to a place I could get out. I made my way back to my truck, which happened to be a stick shift, and drove the five miles back to camp in first gear. Luckily, my friend and others were there when I arrived. They could tell I was in real pain and needed help. As my friend loaded me into his truck to take me to the hospital, some of the other guys went to find my deer. I spent a painful and long night in the emergency room with a dislocated shoulder.

The lesson I learned from this experience is to not get in a hurry and overlook the "little things." Even with all my efforts to be safe in the woods by making sure someone knew where I was, using my safety belt in the deer stand and being careful climbing up and down the tree, I still managed to hurt myself badly enough to end up spending the night in the ER. It just proves there are no small hazards. Sometimes, the "little things" can hurt you just as much as the big ones.«

The Right to Bear Arms

TRACEY RUSSELL
Ground Directorate
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

Rights and responsibilities go hand in hand. As a citizen, you have the right "to keep and bear Arms" under the Second Amendment to the U.S. Constitution. You also have a legal and moral responsibility to handle those "arms" in a safe manner. Safe weapons handling procedures protect you, as well as your Family members, fellow citizens and fellow Soldiers, from harm. Following some simple do's and don'ts for the handling and storage of firearms will allow you to enjoy your constitutional rights and the activities associated with your weapons.

Do

- **Get Safety Training.** Do not assume you are an expert with all weapons because you carried an M4 or M9 during a deployment. Different weapons have different handling characteristics and safety mechanisms. Read your owner's manual and sign up for a class.
- **Know Appropriate Laws and Policies.** Laws, regulations and procedures for the transport, storage and registration of weapons vary between different states and military installations. In accordance with Army Regulation 190-11, Physical Security of Arms, Ammunition, and Explosives, senior commanders are responsible for regulating privately owned weapons on Army installations. Policies will cover information such as registration, prohibited weapons and legal compliance requirements. Take time to familiarize yourself with local policies and adhere to them.
- **THINK Weapons Safety:**
  - **T**reat every weapon as if it is loaded.
  - **H**andle every weapon with care.
  - **I**dentify the target before you fire.
  - **N**ever point the muzzle at anything you do not intend to shoot.
  - **K**eep the weapon on safe and your finger off the trigger until you intend to fire.

Don't

- **Handle Weapons Under the Influence.** Weapons and alcohol never mix. Never use alcohol before or while handling a weapon. Also, be aware that other substances such as prescription medications can alter your perceptions and influence your coordination.
- **Point a Weapon at Anything or Anyone You Don't Intend to Shoot.** This applies even if you "know" a weapon is unloaded. Many Soldiers have lost their lives to "unloaded" weapons.
- **Leave an Unsecured Weapon Unattended.** Secure your weapons unloaded so children or others unfamiliar with weapons handling do not have access to them.

For more information, check out the Range & Weapons Safety Toolbox at https://safety.army.mil/rangeweaponssafety. The toolbox includes a section dedicated to privately owned weapons, which contains safety messages, presentations, videos, posters and links to other tools and resources.

Don't take your rights or responsibilities for granted. Whether you are simply a collector, an avid hunter or enjoy target shooting, the safe handling of weapons will allow you to enjoy your activities while preventing someone from being injured or killed. «

ARE YOU A SHARPSHOOTER?
RANGE & WEAPONS SAFETY TOOLBOX
https://safety.army.mil
CHECK IT OUT TODAY!

The Range & Weapons Safety Toolbox contains information and tools related to the safe handling of privately owned weapons in addition to resources to establish and maintain effective range and weapons safety programs with military weapons.

THE SILENT RECALLS

BOB VAN ELSBERG
Strategic Communication Directorate
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

You've heard of safety recalls on vehicles, but have you heard of Technical Service Bulletins? Many refer to them as silent recalls — notifications that go to dealerships about mechanical and other kinds of problems with your vehicle. They're called "silent" because, unlike normal recalls, you'll probably never be notified by the manufacturer. For the most part, it's up to you to be aware of these things. And you might be surprised at how serious some of these bulletins are.

I'd barely gotten home from work when the telephone rang. On the other side was one of my co-workers, stuck in the parking lot at work. Try as she might, she couldn't get the transmission in her 2008 Chrysler Sebring to shift from "Park" to "Reverse." She'd called a tow truck, but needed a ride home.

By the time I got there, the tow truck driver had "jimmied" the shifter loose. Prying off a silver-colored piece of plastic trim around the shifter console, he'd used a screwdriver to move a small wire cable to unlock the transmission shifter. He explained he'd had to do this with several Chrysler cars.

That got me thinking. The next morning, I went online and checked out the National Highway Traffic Safety Administration's website. I couldn't find a safety recall on the problem; but then I went looking for any possible TSBs. Following the instructions and navigating through NHTSA's website, I finally got to a button that would allow me to "Retrieve TSBs." When I clicked on it, 13 bulletins popped up, and the first one concerned transmission problems. When I hit the "Get Summary" button, I knew I'd hit pay dirt.

Make/Models:	**Model/Build Years:**
CHRYSLER SEBRING	2007-2008
CHRYSLER SEBRING CONV	2007-2008
DODGE/AVENGER	2007-2008
Service Bulletin Number:	CSN-K16
NHTSA Item Number:	10034052

Summary:

See document search button for owner letter. Automatic transmission shift lever interlock spring. Transmission gearshift lever interlock spring retainer hook on vehicles may break. A broken interlock spring retainer hook will result in the inability to move the gearshift lever out of the park position. CSC letter was rec'd. *PE

NO LEMONS, PLEASE

There are more than just safety recalls and Technical Service Bulletins on the National Highway Traffic Safety Administration's website that can clue you in on problems you may be having. If, while you're going through the drill to get the TSBs, you instead hit the "Search Complaints" button, you'll see where owners of the same vehicle as yours have reported problems. Repeated problems may become the target of a Defect Investigation, something else you can search on NHTSA's website.

No one wants to get stuck with a lemon. If you're considering buying a used vehicle, you might want to check out the recalls, TSBs and complaints at www.nhtsa.gov/ before laying down your hard-earned cash. You might discover the "sweet" deal you're being offered might leave you with a bitter aftertaste.

This verified what I suspected after hearing the tow truck driver's comments. The question now was how to deal with it. This wasn't a safety recall where the manufacturer was obligated to notify the owner and repair the problem for free.

I went online to Chrysler's website and found the number for the media relations manager for Chrysler LLC. He advised my co-worker to take the car to the nearest Chrysler dealer and explained the Customer Service Notification (CSN-K16 in the TSB at the bottom of page 38) would identify the issue to the service manager.

My co-worker followed his advice, showing the service manager a printed copy of the TSB, and left the car for service. The dealership repaired the problem without charge and had the car ready for pickup that afternoon. The problem was resolved and my co-worker could now drive her car without fear of being stranded somewhere with a locked transmission. It had been well worth the time to research the issue.

I can't promise every vehicle manufacturer or dealership will handle TSBs the same way. What I can say is it's worth the effort to find out if there are TSBs on your vehicle. In doing further research on NHTSA's website, I discovered some TSBs had been upgraded to safety recalls.

Fortunately, checking for TSBs isn't that hard to do. After going onto NHTSA's website, click on "Vehicle Safety" and then "Recalls and Defects." Going to the bottom of that page, look for "Search for Defects Investigations" and click on the nearby "View All" button. Select the "Search for Technical Service Bulletins for Your Vehicle" button and fill out the following screens providing the year, make and model of your vehicle. When you see the "Retrieve TSBs" button, click it. As you read them, you have the opportunity to select "Get Summary" for more information on each TSB.

So what about you? Could there be a TSB lurking out there that could affect your vehicle? The key is to protect yourself by going to NHTSA's website and researching your own vehicle and bringing it to the attention of your dealership. Why leave your safety to chance? «

Editor's note: Chrysler does attempt to reach consumers with notices on TSBs. My co-worker purchased her car in Korea and shipped it back to the United States during a PCS move. Unfortunately, the paper trail between Chrysler and her was broken and she did not receive notice of the problem with her vehicle.

Pushing The

NAME WITHHELD BY REQUEST

Author's note: If the accident crew in the following scenario had known the "how to" of identifying and assessing hazards and establishing controls, they might be alive today to tell their story. Sadly, they didn't. Now it's up to me to tell you where we failed to effectively manage the seemingly minor hazards that combined to claim their lives.

The mission was simple. Night vision goggle currency sustainment training with some formation flying — point A to point B and return; two hours of flight time with a takeoff at 7 p.m. Pretty basic stuff for Apache pilots — no rocket science involved.

Operations had me scheduled as the pilot in command of Chalk 2 and air mission commander for the flight of two Apaches. My backseater was an assistant brigade S-3 scheduled to transfer to our attack unit. He had a lot of flight time but needed this flight to sustain NVG currency. The PC of the lead aircraft was a new instructor pilot, and his backseater was one of the unit's newer pilots. The Chalk 1 pilot needed to complete some readiness level 2 NVG mission tasks and get some NVG time. To evaluate their mission planning capabilities, the Chalk 1 PC and I allowed the two pilots to plan the mission.

After giving the mission planning team a couple of hours, I looked at the proposed route of flight, which would take us over a large lake. Although it wasn't the route of flight I would have chosen, it was OK. There would be no problems with illumination or weather, so one route was probably as good as the other. I glanced at their performance planning card, and it looked good.

We were doing pretty well for crew endurance even though we had to start our 14-hour duty day a little early so we could attend a 9 a.m. safety meeting. We would still have two hours of our duty day remaining when we finished the mission if we took off at 7 p.m. and flew for just two hours. No problem here.

We went to our respective aircraft about 2 p.m. and spent about an hour preflighting. We noted no deficiencies on either aircraft. But where had those clouds come from? The weather forecaster had given us "clear, blue and 22" on the long-range forecast. Oh well, it looked good enough to go. The moon was full and high enough to give us plenty of light, but those clouds might make for a dark night.

To file the flight plan and get weather, we all met in operations. The weather forecast was for light rain, overcast at 1,500 feet and two miles visibility for the entire flight. This weather was a lot different from the previous forecast, but it was still within the unit standing operating procedures requirements and well within the Army Regulation 95-1, Flight Regulations, criteria for operations in uncontrolled airspace.

When we added up the numbers on the risk assessment sheet, it showed the mission as medium risk. How could that be? The weather wasn't that great and the illumination would be reduced because of the weather. Oh well, we had experienced IPs in both aircraft and the mission was fairly simple.

At 6:45 p.m., we cranked the aircraft and everything was going fine. The Chalk 1 pilot had just called

LIMIT

ground for clearance to taxi for departure when his engine chip detector light illuminated. The Chalk 1 PC called maintenance while I called operations to advise them of our delay. We shut down both aircraft and waited for maintenance to arrive. When the maintenance crew pulled the chip plug, normal fuzz was all they found. The crew started the aircraft again and rechecked the plug. The light remained out. Once we were released for flight, we realized we'd been delayed almost an hour.

The time was just after 8 p.m. when we finally took off. The ceiling appeared to be lower than forecast, and the winds were beginning to gust, causing us a lot more work as we proceeded on course toward our first destination.

The flight visibility started to deteriorate to below two miles and the ceiling was becoming indistinguishable. I asked the flight lead PC how he was doing. "OK," he said. "The weather will make for some good training."

As we approached a large lake along our route, the visibility decreased to about one mile. Everything might have been acceptable had the route not taken us over the lake. As we crossed the shore, I realized I could not tell how high we were. I called flight lead and told him we were going to pick up additional spacing. He responded with a "Roger" and that we should reach the opposite shore in about two minutes. Suddenly, I couldn't see Chalk 1. I heard the PC transmit, "We're IMC [instrument meteorological conditions], change frequency to approach control!" That was the last we heard from them.

As soon as we lost sight of the lead aircraft, we started a 180-degree right turn while notifying them of our actions. When we completed our turn, we could see lights on the shore. As I looked through the NVG tubes, I could see well enough to remain oriented — well enough to get back home.

I figured the other crew would be busy, so I waited for them to contact me. After a couple minutes of waiting for a call, I tried to contact them. I tried on all three commo radios and got no response.

Our home base tower heard me on guard and asked if they could be of assistance. I asked tower if they were in contact with the other aircraft. They said they were not but would contact approach control to see if they were in contact with the aircraft. I told them what had happened and that we were returning to the airfield.

It took us about 15 minutes to get back to the airfield. Neither one of us said a word. I was so sure the other guys were OK — I just knew they were. But they weren't. I kept going over the day's activities in my mind. What could we have done differently that would have saved that crew?

Lessons Learned

First of all, both crews pushed

the limit of their crew day. This is a hazard that aviators deal with frequently. The safety meeting was important, but there are usually makeup sessions and the crews could have come in later. Coming in later would have optimized the crews' day.

The maintenance delay pushed the crew day a little further toward the extreme. Did anyone on either of these crews ask questions about how everyone was feeling or if anyone was too tired to fly? Even if the IPs did ask, maybe one of the pilots was tired but chose not to speak up because of a John Wayne image he thought he had to maintain. Even if the control of starting the duty day later had been exercised, additional evaluation of fatigue may have revealed tired crewmembers, causing us to reevaluate our mission.

The crews opted to fly this mission with less than visual flight rules weather. Although the weather was well within AR 95-1 criteria for operations in uncontrolled airspace, was it appropriate weather for initial NVG mission training or for currency sustainment? There may be circumstances when an IP feels a pilot is proficient enough to advance to flying in this kind of weather. If this were the case, a good control would have been to review the local inadvertent IMC procedures and discuss specific crewmembers' responsibilities before takeoff.

When the visibility began to deteriorate below two miles, the AMC asked the Chalk 1 PC how he was doing. He responded that it would be good training. Maybe that would be true with a more experienced crew. However, to operate below two miles of visibility at night, a crew should be in the "run" mode of the crawl-walk-run training cycle. Since this was initial NVG mission training for the pilot in the lead aircraft, maybe a more prudent assessment would have warranted turning around or just landing where they were. The visibility was continuing to deteriorate, and the trend was fairly obvious.

It is possible the hazards in the immediate area (wires, trees and so forth) could have precluded a safe landing and the most prudent decision may have been to return to the base field. A good control for this flight might have included a discussion of mission continuation criteria before takeoff.

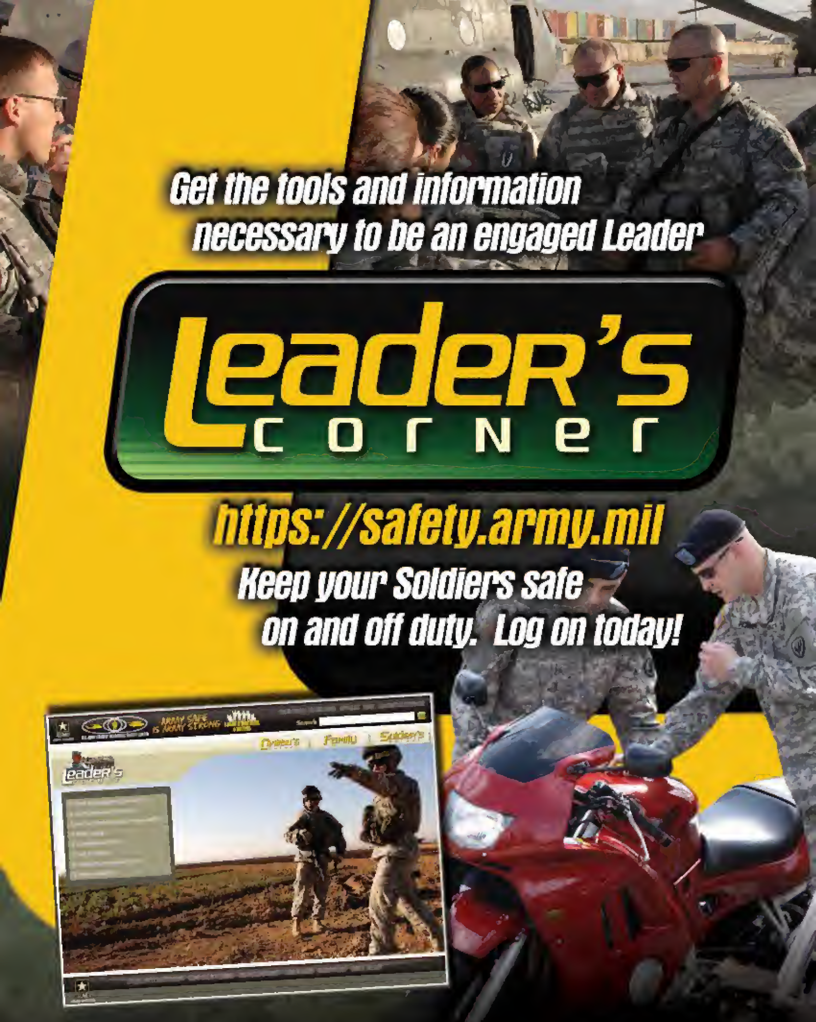
There were IPs on board each aircraft in this situation, and that may be considered a control measure. Typically, IPs are conscientious and knowledgeable; however, they are not superhuman. In fact, they may require additional instrument training from time to time. Presenting instruction and evaluating it are significantly different from doing it yourself.

The IP of Chalk 2 indicated that when he looked under the NVG, he couldn't see anything. Why continue aided in that situation? On a very dark night with no light to help them judge distance, an aircrew may have difficulty judging how far they can actually see unaided. I consider it to be a high risk to continue flying under aided visibility criteria when unaided visibility is below minimums. The unit SOP may be the most appropriate place to establish local procedures regarding aided versus unaided visibility.

Cumulative Effect of Minor Hazards

A close look at the events leading up to the accident will most likely reveal hazards aircrews encounter frequently, with only minor variations from mission to mission. Individually, each hazard presented could be assessed as a low risk. However, the cumulative effect of all these hazards significantly increased the overall mission risk.

To be effective, risk management does not end with the mission planning. The process of identifying, assessing and controlling hazards must continue throughout the mission as the situation changes. While in flight, we often must accomplish "hasty" risk management because the particular situation may demand an immediate response. Time may not allow extensive hazard identification and analysis. In these cases, do as much of the process as time will permit. Even a hasty assessment is better than just reacting. The secret lies in our ability to fully integrate risk management into our basic decision-making process.«


Get the tools and information
necessary to be an engaged Leader
Leader's corner
https://safety.army.mil
Keep your Soldiers safe
on and off duty. Log on today!
ARMY SAFE IS ARMY STRONG
Search
Leader's
Family
Soldier's
Leader's

AVIATION

AH-6M

CLASS A

- Both crewmembers were killed when the aircraft descended into trees and crashed during range training.

AH-64D

CLASS B

- The crew encountered rising terrain and diminished visibility. During landing, the aircraft touched down on rocky terrain, damaging the tail boom and stabilator.

CLASS C

- The aircraft experienced a No. 1 engine failure during takeoff. The crew executed a forced landing, touching down on a dirt berm. The aircraft sustained minor damage to the L330 panel and antenna.

- The aircraft experienced an overtorque condition (135 percent for five seconds) during single-engine operation.

- Maintenance personnel identified damage to a main rotor tip cap during interim Table VIII. A precautionary landing was executed, and inspection identified damage to a tail rotor blade.

CH-47D

CLASS C

- The aircraft struck a dirt mound during a roll-on landing and sustained damage to the left-rear landing gear, hydraulic lines and surrounding sheet metal.

CH-47F

CLASS A

- The aircraft entered an uncontrolled descent on final approach for passenger pickup and landed hard, resulting in separation of the aft rotor assembly/transmission.

CLASS C

- The aircraft sustained damage during hot cargo load operations.

HH-60L

CLASS B

- Maintenance discovered lightning had struck the aircraft while it was parked on the aviation support facility ramp.

MH-60K

CLASS C

- The aircraft's main rotor system contacted the ALQ-144 during an undetermined point in flight.

OH-58D(R)

CLASS C

- The crew experienced a bird strike on final approach for landing. Damage was incurred to the mast-mounted sight, transmission, driveshaft, tail rotor gearbox and all four main rotor blades.

- The aircraft experienced a mast torque exceedance (128 percent for three seconds) during a low-power condition demonstration, which required a drive train replacement.

LOSSES AVIATION

FISCAL 2011

Class A/Fatalities thru October 2011

ATTACK	0/0
RECON	0/0
UTILITY	1/1
CARGO	1/0
TRAINING	0/0
FIXED-WING	0/0
UAS	1/0
TOTAL	3/1

as of Nov. 2, 2011

TH-67A

CLASS C

- The crew experienced a chip detector light, followed by engine failure during climbout. The instructor pilot conducted an autorotation to the stagefield, and the aircraft made ground contact, resulting in separation of the aft portion of the tailboom, vertical fin and tail rotor gearbox.

UH-60A

CLASS B

- The crew was landing for patient

Editor's note: Information published in the accident briefs section is based on preliminary loss reports submitted by units and is subject to change. For more information on selected accident briefs, email safe.knowledge@conus.army.mil.

pickup when the left landing gear settled into soft ground, resulting in the main rotor blades contacting rising terrain.

UH-60L

CLASS B

- Maintenance discovered lightning had struck the aircraft while it was parked on the aviation support facility ramp.

UAS

RQ-7B

CLASS A

- While in a holding pattern, the unmanned aircraft collided with a C-130. Damage was incurred to both aircraft.

CLASS B

- The UA descended during flight, following a generator failure and an earlier Health and Usage Monitoring System alert for oil pressure. The crew deployed the landing chute, and the UA was recovered with damage.

CLASS C

- The UA's landing gear collapsed upon touchdown, impacting the payload and undercarriage as it slid off the runway and impacted terrain.
- The UA experienced rising operating temperatures and loss of altitude during flight. It crashed during an attempt to return to its operating station and was recovered with damage.
- The UA touched down hard during landing and struck a HESCO barrier, resulting in damage.
- The UA descended during flight, following a generator failure and an earlier HUMS alert for oil pressure. The crew deployed the landing chute, and the system was recovered with damage.

LOSSES
GROUND
FISCAL 2011
Class A/Fatalities
thru October 2011

AMV	**3/1**
ACV	**0/0**
PERSONNEL INJURY includes weapons-handling accidents	**1/1**
FIRE/ EXPLOSIVE	**0/0**
PROPERTY DAMAGE	**0/0**
TOTAL	**4/2**

as of Nov. 2, 2011

GROUND

Other

CLASS A

- A Soldier was killed when the SUV he was driving overturned as he returned to the compound following guard duty. Two other Soldiers were treated and released.

- A Soldier was killed when he was struck in the head with decking panels that fell from a forklift after a ratchet strap broke.

Personnel Injury

CLASS A

- A Soldier and his passenger were killed when the civilian single-engine aircraft he was piloting crashed on approach to the runway.

- A Soldier died when he was struck in the head with a round from an M4 as he and two other Soldiers cleaned their weapons.

DRIVING

POV

CLASS A

- A Soldier was driving with his wife and their newborn when he lost control of the vehicle and it struck an embankment and overturned. The wife, who was also a Soldier, was ejected and killed.

- A Soldier was killed when his SUV left the roadway and struck a tree. The Soldier wasn't wearing his seat belt.

POM

CLASS A

- A Soldier was killed when he lost control of his motorcycle at high speed, went off the road and crashed into a fence post. Although the Soldier was wearing a helmet, it was not properly fastened and came off during the accident.

- A Soldier died after he lost control of his motorcycle while trying to exit an interstate and struck a terminal barricade, splitting his helmet in half. Alcohol was a contributing factor in the accident.

- Two Soldiers were riding side-by-side when a minivan entered their path of travel from an adjoining road. One Soldier died when his motorcycle struck the vehicle, and the other was injured when he laid down his bike to avoid the collision. The deceased Soldier was licensed, trained and wearing full personal protective equipment.

- A Soldier was killed when he struck a vehicle that entered his path of travel and was thrown from his bike. He was licensed, trained and wearing full PPE.

LOSSES
POV/POM
FISCAL 2011
Class A/Fatalities
thru October 2011

CAR	**3/3**
SUV/JEEP	**1/1**
TRUCK	**2/2**
MOTORCYCLE	**2/1**
PEDESTRIAN	**1/1**
OTHER* *Includes vans, ATVs, snowmobiles and bicycles	**0/0**
TOTAL	**9/8**

as of Nov. 2, 2011

Fiscal Year 2011: **9**
Three Year Average: **10**

If it happens ...

REPORT IT

ARMY ACCIDENT REPORTING SYSTEM

https://safety.army.mil

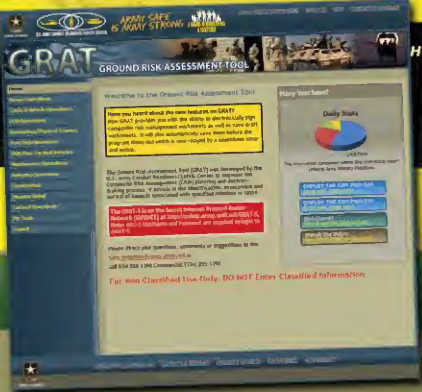
U.S. ARMY
ARMY STRONG.
U.S. ARMY COMBAT READINESS/SAFETY CENTER
ARMY SAFE IS ARMY STRONG
A BAND OF BROTHERS & SISTERS

MAKE SOUND RISK DECISIONS.
REDUCE ACCIDENTAL LOSS.
INCREASE COMBAT POWER.

GRAT

GROUND RISK ASSESSMENT TOOL

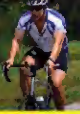
https://safety.army.mil



Welcome to the Ground Risk Assessment Tool

For Non-Classified Use Only. DO NOT Enter Classified Information

Have you heard about the new features on GRAT?



Now GRAT provides you with the ability to electronically sign composite risk management worksheets as well as save draft worksheets. It will also automatically save them before the program times out, which is now relayed by a countdown timer and notice.

GRAT-S

http://safety.army.smil.mil

Now available on the

SIPRNET

ARMY SAFE IS ARMY STRONG

BAND OF BROTHERS & SISTERS